

Please add new claims 21 and 22, cancel claims 7 -11, and amend claims 1, 5-6, 13, 15-16 and 18 as follows:

Applicants hereby submit a version with markings to show changes made:

- 1) (Amended) [A process for delivering a nucleic acid to a heart tissue cell in a mammal, comprising:
 - a) introducing the nucleic acid into a blood vessel; and,
 - b) delivering the nucleic acid to the heart muscle cell.]

A process for delivering a nucleic acid to heart muscle cells in a mammal, comprising:

- a) introducing the nucleic acid to a heart vessel having a channel leading to heart muscle cells wherein there is not more than one heart vessel occlusion site per introduction;
 - b) delivering the nucleic acid to the heart muscle cells.
- 5) (Amended) [The process of claim 4 wherein delivering the nucleic acid includes increasing the blood_vessel permeability.]

The process of claim 4 wherein delivering the nucleic acid includes increasing the heart vessel permeability.

- 6) (Amended) [The process of claim 5 wherein the nucleic acid is selected from the group consisting of DNA, RNA, plasmid DNA, and nucleic acid contained in viruses.]

The process of claim 5 wherein the nucleic acid is selected from the group consisting of DNA, RNA, plasmid DNA, oligonucleotides, and nucleic acid contained in viruses.

- 13) (Amended) [The process of claim 12 wherein delivering the nucleic acid includes increasing the blood vessel permeability.]

The process of claim 12 wherein delivering the nucleic acid includes increasing the heart vessel permeability.

- 15) (Amended) [The process of claim 4 wherein delivering the nucleic acid includes increasing internal pressure of the blood vessel.]
The process of claim 4 wherein delivering the nucleic acid includes increasing internal pressure of the heart vessel.

- 16) (Amended) [The process of claim 15 wherein delivering the nucleic acid includes increasing the blood vessel permeability.]

The process of claim 15 wherein delivering the nucleic acid includes increasing the heart vessel permeability.

18) (Amended) [A process for gene therapy, comprising:

- a) inserting a nucleic acid into a blood vessel having a channel leading to heart muscle;
- b) delivering the nucleic acid to a heart muscle cell; and,
- c) expressing the nucleic acid to provide a therapeutic protein.]

A process for gene expression providing a therapeutic protein, comprising:

- a) inserting a nucleic acid into a blood vessel having a channel leading to heart muscle;
- b) delivering the nucleic acid to a heart muscle cell; and,
- c) expressing the nucleic acid to provide a therapeutic protein.

New Claims:

B² 21) The process of claim 1 wherein the nucleic acid consists of naked DNA.

22) The process of claim 18 wherein the nucleic acid consists of naked DNA.

A clean version of each replacement claim is submitted below. Please enter each claim.

Sub
C1
B³ 1) A process for delivering a nucleic acid to heart muscle cells in a mammal, comprising:

- a) introducing the nucleic acid to a heart vessel having a channel leading to the heart muscle cells wherein there is not more than one heart vessel occlusion site per introduction;
- b) delivering the nucleic acid to the heart muscle cells.

B⁴ 5) The process of claim 4 wherein delivering the nucleic acid includes increasing the heart vessel permeability.

6) The process of claim 5 wherein the nucleic acid is selected from the group consisting of DNA, RNA, plasmid DNA, oligonucleotides, and nucleic acid contained in viruses.

B⁵ 13) The process of claim 12 wherein delivering the nucleic acid includes increasing the heart vessel permeability.